

Safety Data Sheet

Issue date: 09/21/2015

v 1

Last Revision Date: 09/21/2015

1 Identification

- **Product identifier**

- **Trade name: Terraclean Fuel and Post Combustion Cleaner**

- **Part number:** 201220, 201420

- **Application of the substance / the mixture** fuel injector and combustion chamber cleaner

- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

- Terraclean, division of, CPS Products Canada Ltd.

- 1324 Blundel Road

- Mississauga, ON, L4Y 1M5

- Canada

- Phone: (905) 615-8620

- email: customerservice@terraclean.net

- **Emergency telephone number:**

- CHEMTREC International +1 (703) 527-3887 (outside the US), 1-800-424-9300 (in the US) 24 hr

2 Hazard(s) identification

Classified according to the criteria of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), OSHA Hazardous Communication Standard (29 CFR 1910.1200) and the Canadian Controlled Products Regulations.

- **Classification of the substance or mixture**

Flam. Aerosol 1 H222 Extremely flammable aerosol.

Press. Gas H280 Contains gas under pressure; may explode if heated.

Muta. 1B H340 May cause genetic defects.

Carc. 1A H350 May cause cancer.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

- **Label elements**

- **GHS label elements**

- The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02 GHS04 GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

- Gasoline, natural
benzene

- **Hazard statements**

- Extremely flammable aerosol.

- Contains gas under pressure; may explode if heated.

- May cause genetic defects.

- May cause cancer.

- May be fatal if swallowed and enters airways.

- **Precautionary statements**

- Obtain special instructions before use.

- Keep away from heat/sparks/open flames/hot surfaces. No smoking.

- Do not pierce or burn, even after use.

- Do not spray on an open flame or other ignition source.

(Contd. on page 2)

Safety Data Sheet

Issue date: 09/21/2015

v 1

Last Revision Date: 09/21/2015

Trade name: Terraclean Fuel and Post Combustion Cleaner

(Contd. of page 1)

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

IF exposed or concerned: Get medical advice/attention.

Do NOT induce vomiting.

Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Additional information:**

- Restricted to professional users.

- Buildup of explosive mixtures possible without sufficient ventilation.

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture: consisting of the following hazardous components.

- **Chemical components:**

8006-61-9	Gasoline, natural	98-100%
	Flam. Liq. 2, H225; Muta. 1B, H340; Carc. 1B, H350; Asp. Tox. 1, H304	
124-38-9	carbon dioxide	0.1-≤2.5%
	Press. Gas, H280	
71-43-2	benzene	0.1-<1%
	Flam. Liq. 2, H225; Muta. 1B, H340; Carc. 1A, H350; STOT RE 1, H372; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

- **Description of first aid measures**

- **After inhalation:**

- Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

- **After skin contact:**

- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation continues, consult a doctor.

- **After eye contact:**

- Rinse cautiously with water. Remove contact lenses, if present and easy to do. Get medical attention if eye irritation develops or persists.

- **After swallowing:** Do not induce vomiting; immediately call for medical help.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed**

- Headache

- Dizziness

- Disorientation

- Nausea

- Harmful if swallowed. May be fatal if swallowed and enters airways. Swallowing a small quantity of this material will result in serious health hazard.

(Contd. on page 3)

Safety Data Sheet

Issue date: 09/21/2015

v 1

Last Revision Date: 09/21/2015

Trade name: Terraclean Fuel and Post Combustion Cleaner

(Contd. of page 2)

May cause eye irritation. Symptoms may include discomfort or pain, excessive blinking and tear production, with possible redness and swelling.

May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. Repeated exposure to this material can result in absorption through skin causing significant health hazard.

- **Indication of any immediate medical attention and special treatment needed**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.

- **For safety reasons unsuitable extinguishing agents:** Water

- **Special hazards arising from the substance or mixture** See section 10 for additional information.

- **Advice for firefighters**

- **Protective equipment:**

Recommend wearing self-contained breathing apparatus. Water may cause splattering.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

- **Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

- **Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

- **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- **Handling:**

- **Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

- **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

(Contd. on page 4)

NA

Safety Data Sheet

Issue date: 09/21/2015

v 1

Last Revision Date: 09/21/2015

Trade name: **Terraclean Fuel and Post Combustion Cleaner**

(Contd. of page 3)

- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
 - **Requirements to be met by storerooms and receptacles:**
 - Store in a cool location.
 - Observe official regulations on storing packagings with pressurized containers.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:**
 - Keep receptacle tightly sealed.
 - Do not gas tight seal receptacle.
 - Store in cool, dry conditions in well sealed receptacles.
 - Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection· **Control parameters**· **Components with limit values that require monitoring at the workplace:****8006-61-9 Gasoline, natural (50-100%)**

REL (USA)	See Pocket Guide App. A
TLV (USA)	STEL: 1480 mg/m ³ , 500 ppm TWA: 890 mg/m ³ , 300 ppm Bulk handling

124-38-9 carbon dioxide (0.1-≤2.%)

PEL (USA)	TWA: 9000 mg/m ³ , 5000 ppm
REL (USA)	STEL: 54.000 mg/m ³ , 30.000 ppm TWA: 9000 mg/m ³ , 5000 ppm
TLV (USA)	STEL: 54.000 mg/m ³ , 30.000 ppm TWA: 9000 mg/m ³ , 5000 ppm
EL (Canada)	STEL: 15000 ppm TWA: 5000 ppm
EV (Canada)	STEL: 54.000 mg/m ³ , 30.000 ppm TWA: 9.000 mg/m ³ , 5.000 ppm

71-43-2 benzene (0.1-<1%)

PEL (USA)	STEL: 15* mg/m ³ , 5* ppm TWA: 3* mg/m ³ , 1* ppm *table Z-2 for exclusions in 29CFR1910.1028(d)
REL (USA)	STEL: 1 ppm TWA: 0.1 ppm See Pocket Guide App. A
TLV (USA)	STEL: 8 mg/m ³ , 2.5 ppm TWA: 1.6 mg/m ³ , 0.5 ppm Skin; BEI
EL (Canada)	STEL: 2.5 ppm TWA: 0.5 ppm Skin; ACGIH A1; IARC 1
EV (Canada)	STEL: 2.5 ppm TWA: 0.5 ppm Skin

(Contd. on page 5)

NA

Safety Data Sheet

Issue date: 09/21/2015

v 1

Last Revision Date: 09/21/2015

Trade name: Terraclean Fuel and Post Combustion Cleaner

(Contd. of page 4)

· Ingredients with biological limit values:	
71-43-2 benzene (0.1-<1%)	
BEI (USA)	25 µg/g creatinine Medium: urine Time: end of shift Parameter: S-Phenylmercapturic acid (background)
	500 µg/g creatinine Medium: urine Time: end of shift Parameter: t,t-Muconic acid (background)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Chemical resistant protective gloves

· **Eye protection:**



Safety glasses. If potential for splash or mist exists, wear chemical goggles or faceshield.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

- **Form:** Gas/Pressurized Liquid
- **Color:** Clear
- **Odor:** Characteristic
- **Odour threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** > 29 °C

· **Flash point:** -30 °C

· **Flammability (solid, gaseous):** Not applicable.

(Contd. on page 6)

Safety Data Sheet

Issue date: 09/21/2015

v 1

Last Revision Date: 09/21/2015

Trade name: Terraclean Fuel and Post Combustion Cleaner

(Contd. of page 5)

· Ignition temperature:	
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density at 20 °C:	0.74 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
· Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
· Dynamic:	Not determined.
· Kinematic:	Not determined.
· Solvent content:	
· Organic solvents:	0.5 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
 - **Thermal decomposition / conditions to be avoided:**
Flammable liquid and vapour. May form flammable/explosive vapour-air mixture.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Heat, open flames, sparks.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** May include, and are not limited to: oxides of carbon.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

Dermal	LD50	9600 mg/kg (mouse)
71-43-2 benzene		
Oral	LD50	4894 mg/kg (rat)
Dermal	LD50	48 mg/kg (mouse)
Inhalative	LC50/4 h (vapor)	9980 mg/L (mouse)

(Contd. on page 7)

NA

Safety Data Sheet

Issue date: 09/21/2015

v 1

Last Revision Date: 09/21/2015

Trade name: Terraclean Fuel and Post Combustion Cleaner

(Contd. of page 6)

- **Primary irritant effect:**
 - **on the skin:**
May cause mild skin irritation. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis.
 - **on the eye:** May cause eye irritation.
 - **Inhalation:** May cause respiratory tract irritation.
 - **Ingestion:** May be fatal if swallowed and enter airways.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Carcinogenic.
The product can cause inheritable damage.

· **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
8006-61-9	Gasoline, natural	2B
71-43-2	benzene	1
· NTP (National Toxicology Program)		
71-43-2	benzene	K
· OSHA-Ca (Occupational Safety & Health Administration)		
71-43-2	benzene	

12 Ecological information

- **Toxicity**
 - **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
 - **Bioaccumulative potential** No further relevant information available.
 - **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
 - **General notes:**
Water hazard class 3 (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
 - **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 8)

Safety Data Sheet

Issue date: 09/21/2015

v 1

Last Revision Date: 09/21/2015

Trade name: Terraclean Fuel and Post Combustion Cleaner

(Contd. of page 7)

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number	
· DOT, IMDG, IATA	UN1950
· TDG	UN1950
· UN proper shipping name	
· DOT	Aerosols
· TDG	Aerosols
· IMDG, IATA	AEROSOLS
· Transport hazard class(es)	
· DOT	
· Class	2 Gases
· TDG	
· Class	2 Gases
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Gases
· EMS Number:	F-D,S-U
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 1950 AEROSOLS, 2

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· Sara

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

71-43-2 benzene

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

(Contd. on page 9)

Safety Data Sheet

Issue date: 09/21/2015

v 1

Last Revision Date: 09/21/2015

Trade name: Terraclean Fuel and Post Combustion Cleaner

(Contd. of page 8)

· Proposition 65

· Chemicals known to cause cancer:	
71-43-2	benzene

· Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	

· Chemicals known to cause reproductive toxicity for males:	
71-43-2	benzene

· Chemicals known to cause developmental toxicity:	
71-43-2	benzene

· Carcinogenic categories

· EPA (Environmental Protection Agency)		
71-43-2	benzene	A, K/L

· TLV (Threshold Limit Value established by ACGIH)		
8006-61-9	Gasoline, natural	A3
71-43-2	benzene	A1

· NIOSH-Ca (National Institute for Occupational Safety and Health)		
8006-61-9	Gasoline, natural	
71-43-2	benzene	

· Canadian substance listings:

· Canadian Domestic Substances List (DSL)	
All ingredients are listed.	

· Canadian Ingredient Disclosure list (limit 0.1%)	
71-43-2	benzene

· Canadian Ingredient Disclosure list (limit 1%)	
All ingredients are listed.	

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS02 GHS04 GHS08

· Signal word Danger

· Hazard-determining components of labeling:

Gasoline, natural
benzene

· Hazard statements

Extremely flammable aerosol.
Contains gas under pressure; may explode if heated.
May cause genetic defects.
May cause cancer.
May be fatal if swallowed and enters airways.

· Precautionary statements

Obtain special instructions before use.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Do not pierce or burn, even after use.

(Contd. on page 10)

Safety Data Sheet

Issue date: 09/21/2015

v 1

Last Revision Date: 09/21/2015

Trade name: Terraclean Fuel and Post Combustion Cleaner

(Contd. of page 9)

Do not spray on an open flame or other ignition source.
 Wear protective gloves/protective clothing/eye protection/face protection.
 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 IF exposed or concerned: Get medical advice/attention.
 Do NOT induce vomiting.
 Store locked up.
 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

- H225 Highly flammable liquid and vapor.
- H280 Contains gas under pressure; may explode if heated.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H340 May cause genetic defects.
- H350 May cause cancer.
- H372 Causes damage to organs through prolonged or repeated exposure.

- **Contact:** Engineering Department

- **Issue Date** September 21, 2015
- **Revision Changes:** v 1.0 - original SDS release (September 21, 2015)

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Flam. Aerosol 1: Flammable aerosols, Hazard Category 1
 Press. Gas: Gases under pressure: Compressed gas
 Press. Gas: Gases under pressure: Liquefied gas
 Flam. Liq. 2: Flammable liquids, Hazard Category 2
 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
 Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
 Muta. 1B: Germ cell mutagenicity, Hazard Category 1B
 Carc. 1A: Carcinogenicity, Hazard Category 1A
 Carc. 1B: Carcinogenicity, Hazard Category 1B
 STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1
 Asp. Tox. 1: Aspiration hazard, Hazard Category 1

NA